

What is claimed is:

1. A transmission power control system for controlling, at the time of wireless communication between the base station and a mobile station, the transmission power from the base station to the mobile station to the optimum value by using the desired SIR (desired signal power versus noise power ratio), wherein:

the desired SIR is preset on the basis of the communication quality of the communication and the degree of follow-up of the received SIR from the desired SIR.

2. The transmission power control system according to the present invention, wherein the degree of follow-up of the desired SIR by the received SIR is decided by the absolute value of the difference between the desired SIR and the received SIR.

3. The transmission power control system according to claim 1, wherein the degree of follow-up of the desired SIR by the received SIR is decided by the time integral of the absolute value of difference between the desired SIR and the measured value of the received SIR.

4. The transmission power control system according to claim 2, wherein the absolute value of the difference between the desired value and the measured value is compared with a predetermined threshold, and the desired SIR is increased or reduced based on the result of the comparison.

5. The transmission power control system according to

one of claims 1 to 4, wherein the desired SIR value is stored, and the newly preset desired SIR value is also stored in the memory.

6. The transmission power control system according to one of claims 1 to 5, wherein the desired SIR is controlled by the desired SIR controller by reading out the desired communication quality value from a demodulator, reading out the desired communication quality value from a communication quality measuring part, reading out the measured SIR value from an SIR measuring unit from a memory, and reading out the measured SIR value from the SIR measuring part.

7. The transmission power control system according to one of claims 1 to 6, wherein the wireless communication between the base station and the mobile station is a wireless communication system such as W-CDMA system using outer loop transmission power control.

8. A transmission power controlling system comprising:
a communication quality measuring part for measures parameters representing the communication quality such as BER and BLER;

an SIR measuring part for measures the SIR of the received signal;

a demodulating part for demodulating various data from their received signals; and

a desired SIR control part for determining a desired SIR

value based on the desired value and measured value of the communication quality and the desired value and measured value of SIR.